REMARKS:

In response to the Office Action, claim 15 has been canceled without prejudice, claims 1, 11, 16, 17, 19, and 25 have been amended, claim 18 has been rewritten in independent form, and new claims 27 and 28 have been added. Support for the amendments may be found, for example, in the paragraphs at page 75, lines 3-23, and between page 78, line 20 and page 79, line 10. No new matter has been introduced. Therefore, claims 1-14, 16-20, and 25-28 are currently pending.

In the Office Action, claims 1-3, 10, 11, 15, 19, and 25 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,223,936 ("the Jeanbourquin reference) and claims 1 and 4-6 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,801,434. In addition, claims 7, 8, 12-14, 17, 20, and 26 were rejected under 35 U.S.C. § 103(a) as unpatentable over the Jeanbourquin reference in view of U.S. Patent No. 6,994,686 ("the Cruise et al. reference"), and claims 9 and 16 were rejected under 35 U.S.C. § 103(a) as unpatentable over the Jeanbourquin reference in view of U.S. Publication No. 2004/0236262 ("the McIntosh et al. reference"). Because none of the cited references, either alone or in combination disclose, teach, or suggest the subject matter of the present claims, the rejections should be withdrawn.

As an initial matter, Applicants appreciate the Examiner's indication that claim 18 would be allowable if rewritten in independent form. Accordingly, claim 18 has been rewritten in independent including all of the limitations of the base claim and any intervening claims.

Turning first to the Jeanbourquin reference, a device is disclosed for simultaneously delivering fluids from two containers. Col. 1, lines 9-10. The device includes two syringe bodies 4a, 4b fixed to a carrier 10 and a grip 20. Col. 2, lines 13-24. A slider 30 is slidably mounted to the carrier 10 and is displaced proximally by a spring 32 unless prevented by braking

surface 41. Col. 2, lines 38-44. A brake lever 40 is urged by a spring 50 resulting in the braking surface 41 being urged against the slider 30. Col. 2, lines 55-59. During use, the brake lever 40 is pulled to a grip 20 against the force of the spring 50, thereby reducing the effect of the braking surface 41 on the slider 30 and the slider is shifted by spring 32. Col. 2, line 65 to col. 3, line 2. To prevent accidental actuation of the brake lever, a locking mechanism 60 is applied between the brake lever 40 and the grip 20. Col. 3, lines 9-11.

Turning to the present claims, claim 1 recites an apparatus for delivering a sealing compound into a puncture extending through tissue that includes a pair of barrels, each barrel having a chamber for storing a component of the sealing compound, each chamber further having a port in a distal portion of the chamber; a plunger assembly comprising a pair of pistons, each piston slidable within a respective one of the barrel chambers from a proximal position to a distal position for delivering the components out of the barrel chambers through the respective ports; and an auto-injection assembly coupled to the plunger assembly, the auto-injection assembly comprising a spring mechanism locked in an inactive condition, and an actuator coupled to the spring mechanism, the actuator activatable to release the spring mechanism such that the spring mechanism automatically directs the pistons towards their distal position to thereby deliver the components out of the barrel chambers once the actuator is activated.

The Jeanbourquin reference fails to disclose, teach, or suggest an actuator coupled to a spring mechanism, the actuator activatable to release the spring mechanism such that the spring mechanism automatically directs pistons towards their distal position to thereby deliver components out of barrel chambers once the actuator is activated, as claimed. Instead, the Jeanbourquin reference discloses two springs, neither of which is released when an actuator is

activated. One Jeanbourquin spring 50 is provided between a brake lever 40 and a grip 20 that may be compressed when a user pulls the brake lever 40 towards the grip 20 to release a braking surface. When the brake lever is released, the spring biases the braking surface to engage a slider to stop fluid delivery from the barrels. Thus, this spring has nothing to do with directing pistons to deliver components out of barrel chambers, and in fact prevents such delivery.

The other Jeanbourquin spring 32 constantly urges a slider to move proximally relative to a carrier, but the urge is resisted by a braking surface 41 unless the brake lever 40 is pulled towards the grip 20. Thus, this spring is not ***released*** once an actuator is activated to ***automatically*** direct pistons towards their distal position to deliver components out of barrel chambers. Instead, the Jeanbourquin brake lever may be pulled and released to selectively deliver fluids from syringe barrels. Specifically, if a user pulled the brake lever for a short time and then released it, fluid would stop flowing from the syringe barrels because the braking surface 41 would again engage the slider 30.

In contrast to the Jeanbourquin device, one of the advantages of the claimed auto-injection assembly is that it ***automatically*** delivers components, such as sealing components, from barrels without unintended pauses. As explained at page 79, lines 3-7 of the present application "Such interruptions risk occluding the delivery line, i.e., the 'Y' fitting, mixer, or other passages through which the sealing compound passes. This may be a particular concern where the sealing compound has a relatively short gel or set-up time." The Jeanbourquin reference fails to address this concern and would actually exacerbate this problem, because the disclosed device is biased to stop delivery. Even if there somehow was motivation to provide sealing components in the Jeanbourquin device, which Applicants do not concede, the device

risks occluding a delivery line, because the device is biased to stop fluid flow when the user releases the brake lever and cannot automatically deliver fluid. For these reasons, claim 1 and its dependent claims are neither anticipated by nor otherwise obvious over the Jeanbourquin reference.

For similar reasons, claims 11, 19, 25, and their dependent claims are also neither anticipated by nor otherwise obvious over the Jeanbourquin reference. Similar to claim 1, claim 19 recites an auto-injection assembly that includes an actuator and a spring mechanism that automatically directs the plunger assembly towards the distal position to inject the sealing components out of the barrels when the actuator is activated. Claims 11 and 25 recite methods that include activating an actuator coupled to a spring mechanism to release the spring mechanism, whereupon the spring mechanism automatically directs the plunger assembly towards the second position to inject the sealing components out of the barrels.

None of the secondary references provide any teaching or suggestion of such an auto-injection assembly or method for automatically directing a plunger assembly to inject sealing components out of barrels, as claimed. Both the Cruise et al. and McIntosh et al. references merely disclose double syringe delivery systems that are manually operated to deliver fluids out of syringe barrels.

Finally, turning to the Kido et al. reference, a dual pipette device is disclosed that includes housings 10, 30 joined by hinges 2, and a pair of piston members 20, 40 disposed in the housings 10, 30. Col. 5, lines 11-20. Push rods 21, 41 are connected to the piston members 20, 40, which are urged upwardly by springs 25, 45. Col. 5, lines 26-30. During use, each push rod is pushed down to move the piston rod down before dipping the tip 6 of the pipette in a reagent

bottle. Col. 6, lines 23-28. The push rod is then released, and the piston rod is moved up by the urging force of the spring to draw solution in the bottle into the housing. Col. 6, lines 28-33. After locking the housings together, the user may then manually push one or both push rods 21, 41 down to simultaneously deliver reagents from both housings. Col. 6, lines 46-52.

Thus, the Kido et al. reference does not teach or suggest an actuator coupled to a spring mechanism, the actuator activatable to release the spring mechanism such that the spring mechanism automatically directs pistons to deliver components out of barrel chambers, as recited in claim 1. In fact, the Kido et al. reference teaches the exact opposite. The Kido et al. device includes springs that ***bias pistons to draw fluid into housings***. In order to deliver fluid from the housings, a user must push down on one or more push rods to overcome the bias of the springs. Accordingly, the present claims are neither anticipated by nor otherwise obvious over the Kido et al. reference.

In view of the foregoing, it is submitted that the claims now presented in this application define patentable subject matter over the cited prior art. Accordingly, reconsideration and allowance of the application is requested.

Respectfully submitted,
VISTA IP LAW GROUP LLP

Dated: May 7, 2007

By _____
William A. English
Reg. No. 42,515
Attorneys for Applicants

2040 Main Street, 9th Floor
Irvine, CA 92614
Telephone: (562) 665-3953
Facsimile: (949) 625-8955